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09/934,474	08/23/2001	Masanobu Iwasaki	50090-334	8431

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McDermott, Will & Emery  
600 13th Street, N.W.  
Washington, DC 20005-3096

EXAMINER

SHAKERI, HADI

ART UNIT	PAPER NUMBER
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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

GROUP 3700

Paper No. 11

Application Number: 09/934,474

Filing Date: August 23, 2001

Appellant(s): IWASAKI ET AL.

McDermott, Will & Emery  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed November 04, 2002.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

Appellant's brief includes a statement that claims 1-19 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) *ClaimsAppealed***

A substantially correct copy of appealed claims 1 and 10 appears on page 10 of the Appendix to the appellant's brief. The minor errors are as follows: "the mist of water supplied from said supply unit" line 7, claim 1 is repeated. In claim 10 (Four Times Amended), "unit" line 8, should be deleted.

**(9) *Prior Art of Record***

5478435	Murphy et al.	12-1995
5,997,392	Chamberlin et al.	12-99

**(10) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-19 are rejected under 35 U.S.C. 103 (a) over Murphy et al. in view of Chamberlin et al. This rejection is set forth in prior Office Action, Paper No. 06.

**(11) *Response to Argument***

Murphy et al. teach a point of use slurry dispensing system with controls for dilution, temperature and additive infusion. An unmixed slurry is mixed with a diluting agent and an additive at or near the last possible moment before the slurry is used so that any one or all of temperature, dilution or additive concentration at the point of dispense can be controlled. The dispensing point (19) (49) is disclosed as the open end of the dispensing line. Chamberlin et al. teaches a slurry injection technique using smaller amounts of chemical or other slurry used to polish the workpiece while maintaining the polishing rate and uniformity in which the "openings and/or spray nozzles atomize the slurry forming a mist", col. 5, line 50. Now regarding the statement "even if the applied references are combined as proposed by the Examiner, the claimed invention would not result, since none of the claims involve spraying the ultimate slurry onto the pad in the form of a mist" as argued by the appellant is addressed first with respect to groups three and four, claims 2, 4, 7, 9 and 11, 15, 17, 19. These claims recite supplying a mist of slurry, a mist of additive and a mist of water to the polishing table, Murphy et al. discloses supplying a slurry, an additive and water to the table as disclosed in Fig. 1 and col. 5, lines 39-41, thus the system modified by the teachings of Chamberlin et al., i.e., openings dispensing in a form of a mist, would result in a method and apparatus supplying a mist of slurry, a mist of additives and a mist of water meeting all the limitations of the above mentioned claims.

With regards to groups one and two, claims 1, 3, 5, 6 and 10, 12, 13, 14, 16, 18, apparatus and method claims reciting a mixing unit, the argument is that the references when

combined would result to supplying a mist of "ultimate" slurry. This argument would be persuasive if only the embodiment as disclosed by Murphy et al. in Fig. 4, i.e., single dispensing point opening (49), were to be modified by Chamberlin et al. to dispense a mist. However, an embodiment as disclosed by Murphy et al., in col. 5, lines 51-61, "...For example, at dispensing point (of either the single dispensing line embodiment or the multiple dispensing line embodiment), instead of dispensing directly onto the pad, a container can be used to collect the liquid(s) for further dispensing onto the pad..." i.e., the embodiment wherein a separate slurry supply line, an additive supply line and a water supply line, all dispensing into a container, modified by Chamberlin et al., openings spraying in a mist form, would meet all the limitations of the claims and whether the "ultimate" slurry (after collection in the container and further dispensed onto the pad) is supplied as a mist or not is irrelevant. Therefore the argument regarding the factual error is erroneous and the argument regarding *Indicium of Nonobviousness*, is not persuasive since slurry having coarse abrasive grains is not even claimed and the references combined meet all the claims limitations.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

HS  
November 20, 2002

Conferees  
Joseph J. Hail, SPE  
Eileen Morgan, Primary Patent Examiner

MCDERMOTT, WILL & EMERY  
600 13TH STREET, N.W.  
WASHINGTON, DC 20005-3096

  
EILEEN P. MORGAN  
PRIMARY EXAMINER

  
Joseph J. Hail, III  
Supervisory Patent Examiner  
Technology Center 3700